

REMARKS/ARGUMENTS

Claims 93-95 are amended, and claims 1-57, 59, 75, 79, 80, 82, 84-92, and 98-100 are canceled without prejudice. In addition, claims 101-103 are newly added. Claims 58, 60-74, 76-78, 81, 83, 93-95, and 101-103 are now pending in the application. Applicants request favorable reconsideration and reexamination of the application.

As noted above, in a telephone conference with Examiner Gilman on June 19, 2007, Examiner Gilman indicated that the finality of the Office Action of March 21, 2007 would be withdrawn, permitting entry of this amendment. Applicants accordingly request that the finality of the Office Action of March 21, 2007 be withdrawn and this amendment entered.

Claims 58, 60-74 and 76-78, 84-97 were rejected as anticipated by Eldridge et al. (U.S. Patent No. 5,974,662, hereinafter Eldridge '662), and claims 58, 76-78, 80, 81, and 84-89 were rejected as anticipated by Parrish (U.S. Patent No. 6,215,320). In addition, claims 37, 38, 42, 49, 50, 60, and 63 were rejected as obvious in view of Eldridge '662 or Parrish alone or in combination with one or more of the following: Eldridge et al. (U.S. Patent No. 6,184,053, hereinafter Eldridge '053); Brozowski et al. (Electronic Packaging & Interconnection Handbook, McGraw Hill, 1997, Ch. 8); and Sano (U.S. Patent No. 5,703,494). Applicants respectfully traverse these rejections.

Independent claims 58 recites "means for attaching said interposer to said contactor such that at least one of said contactor or said interposer is moveable between a first position and a second position while said interposer is attached to said contactor." Claim 58 further recites that "in said first position, said first plurality of contact elements do not contact said first terminals on said contactor, and in said second position, said first plurality of contact elements contact said first terminals on said contactor and said first plurality of contact elements and said second plurality of contact elements provide electrical connections from said first terminals on said contactor to a second plurality of terminals on said electronic device."

Turning first to the rejection of claim 58 in view of Parrish, Applicants note that the PTO equated Parrish's three point planarizer 34 with the "means for attaching" element of claim 58. Parrish does not, however, disclose that, while the interposer 36 is attached to the probe card 30, the planarizer 34 allows the probe card 30 or interposer 36 to move between a first position in which contact elements of the interposer do not contact the probe card 30 and a second position in

which the contact elements of the interposer 36 contact the probe card 30. In other words, there is no teaching in Parrish that planarizer 34 allows, while the interposer 36 is attached to the probe card 30, the interposer 36 to move in and out of contact with the probe card 30. In fact, Parrish says very little about the planarizer 34. Parrish thus fails to disclose the "means for attaching" and, in particular fails to disclose that "while said interposer is attached to said contactor," "at least one of said contactor or said interposer is moveable between a first position" in which "said first plurality of contact elements do not contact said first terminals on said contactor" and "a second position in which "said first plurality of contact elements contact said first terminals on said contactor."

Moreover, logically, Parrish's probe card assembly 24 functions as follows. The pin interface 32 is biased toward the probe card 30. The tilt of the pin interface 32 can then be changed with respect to the probe card 30 by rotating the screws of the planarizers 34. As a screw of a planarizer 34 is advanced toward the pin interface 32, the screw pushes a portion of the pin interface 32 away from the probe card 30, and as a screw of a planarizer 34 is retracted away from the pin interface 32, the biasing force pushes a portion of the pin interface 32 toward the probe card 30. By using three such planarizers 34, the tilt of the pin interface 32 can be altered with respect to the probe card 30. Logically, Parrish's interposer 36 provides spring-like flexible electrical connections that maintain constant electrical contact with both the probe card 30 and the pin interface 32 as the tilt of the interface 32 is adjusted. In fact, the foregoing would appear to be essential to proper operation of Parrish's probe card assembly 24, whose purpose is to provide electrical connections from the probe card 30 to the probes on the bottom of the pin interface 32. Thus, Parrish's probe card assembly 24 would not operate properly or perform its intended function if the interposer 36 moved out of contact with the probe card 30. For this additional reason, claim 58 is patentable over Parrish.

In rejecting claim 58 in view of Eldridge '662, the Examiner did not identify an element disclosed in Eldridge '662 that corresponds to the "means for attaching" element of claim 58. For at least this reason, claim 58 is also patentable over Eldridge.

Independent claims 93 and 95 also recite a "means for attaching" that is similar to the "means for attaching" recited in claim 58. Claims 93 and 95 are patentable, therefore, for at least the reasons discussed above with respect to claim 58.

In addition, claim 93 recites that the "means for attaching further functions to allow, while said interposer is attached to said contactor, said interposer to move from said first position to said second position upon application of forces to ones of said second plurality of contact elements." Independent claim 95 recites that "said means for attaching further functions to allow, while said interposer is attached to said contactor, said interposer to move from said first position to said second position in response to ones of said second plurality of terminals on said electronic device being pressed against said ones of second plurality of contact elements."

In rejecting claims 93 and 95, the PTO relied on forces applied by Eldridge's "planarizer," which Applicants understand to refer to differential screws 536, 538. As can be seen in Figure 5, Eldridge's differential screws 536, 538 are not shown applying forces to Eldridge's contact elements 524 (which the PTO equated with the second resilient contacts recited in claim 93). For at least this reason, the PTO has not shown that Eldridge anticipates claim 93 or claim 95.

Claims 60-74, 76-78, 81, 83, 94, and 101-103 depend from one of claim 58, claim 93, or claim 95 and, at least because of that dependency, are also patentable over Parrish and Eldridge '662. Moreover, the PTO did not rely on Eldridge '053, Brozowski, or Sano as teaching any of the features discussed. Claims 60-74, 76-78, 81, 83, 94, and 101-103 are therefore patentable over Parrish, Eldridge '662, Eldridge '053, Brozowski, and Sano taken alone or in combination.

Applicants note that new claim 101 recites "the contactor comprises an integrated circuit and ones of the first plurality of terminals are input pads or output pads of the integrated circuit." New claim 102 recites that "the integrated circuit comprises power regulator circuitry configured to regulate power provided to said electronic device," and claim 103 recites that "the integrated circuit comprises power regulator circuitry configured to output to one of the output pads regulated power." As discussed in paragraph [0084] of the specification, providing power regulator circuitry can reduce voltage drop across the test apparatus and can thus be advantageous over the prior art record, which the PTO has not shown to teach such features. For the foregoing reasons as well as other reasons, new claims 101-103 thus further distinguish over the prior art of record.

In view of the foregoing, Applicants submit that all of the claims are allowable and the application is in condition for allowance. If at any time the Examiner believes that a discussion

with Applicants' attorney would be helpful, the Examiner is invited to contact the undersigned at (801) 426-2106.

Respectfully submitted,

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